1648

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/459,062**

DATE: 07/19/2001
TIME: 09:50:53

Input Set : **A:\17634341.app**
Output Set: **N:\CRF3\07192001\I459062.raw**

```
 3 <110> APPLICANT: Tao, Tao
 4       Skiadopoulos, Mario H.
 5       Collins, Peter L.
 6       Murphy, Brian R.
 8 <120> TITLE OF INVENTION: CONSTRUCTION AND USE OF RECOMBINANT PARAINFLUENZA
 9       VIRUSES EXPRESSING A CHIMERIC GLYCOPROTEIN
11 <130> FILE REFERENCE: 17634-000340US
13 <140> CURRENT APPLICATION NUMBER: 09/459,062
14 <141> CURRENT FILING DATE: 1999-12-10
16 <150> PRIOR APPLICATION NUMBER: 09/083,793
17 <151> PRIOR FILING DATE: 1998-05-22
19 <150> PRIOR APPLICATION NUMBER: 60/059,385
20 <151> PRIOR FILING DATE: 1997-09-19
22 <150> PRIOR APPLICATION NUMBER: 60/047,575
23 <151> PRIOR FILING DATE: 1997-05-23
25 <160> NUMBER OF SEQ ID NOS: 57
27 <170> SOFTWARE: PatentIn Ver. 2.1
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30 <211> LENGTH: 42
31 <212> TYPE: DNA
32 <213> ORGANISM: Artificial Sequence
34 <220> FEATURE:
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36       sequence of measles HA gene insert for N-P and P-M
37       junctions.
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44 <211> LENGTH: 36
45 <212> TYPE: DNA
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49 <223> OTHER INFORMATION: Description of Artificial Sequence: Flanking
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51       junctions.
53 <400> SEQUENCE: 2
54 gatccaacaa agaaacgaca ccgaacaaac cttaag                               36
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58 <211> LENGTH: 101
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63 <223> OTHER INFORMATION: Description of Artificial Sequence: Flanking
64       sequence of measles HA gene insert for HN-L
65       junction.
67 <400> SEQUENCE: 3
68 aggcctaaaa gggaaatata aaaaacttag gagtaaagtt acgcaatcca actctactca 60
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78 <223> OTHER INFORMATION: Description of Artificial Sequence: Flanking
79   sequence of measles HA gene insert for HN-L
80   junction.
82 <400> SEQUENCE: 4
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84 gcaatcagac aataggcct   79
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88 <211> LENGTH: 83
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial Sequence
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93 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward primer
94   for PCR of measles HA gene insert for N-P and P-M
95   junction.
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99 gagaccggat aaatgccttc tac   83
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103 <211> LENGTH: 67
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: Reverse primer
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110   junctions.
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114 catcttc   67
117 <210> SEQ ID NO: 7
118 <211> LENGTH: 55
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward primer
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125   junction.
127 <400> SEQUENCE: 7
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132 <211> LENGTH: 68
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:

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137 <223> OTHER INFORMATION: Description of Artificial Sequence:
138   Reverse/Forward primer for PCR of measles HA gene
139   insert for HN-L junction.
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143 gtccttcc   68
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152 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward primer
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154   junction.
156 <400> SEQUENCE: 9
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158 atctatctat aatacaa   77
161 <210> SEQ ID NO: 10
162 <211> LENGTH: 28
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164 <213> ORGANISM: Artificial Sequence
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167 <223> OTHER INFORMATION: Description of Artificial Sequence: Reverse primer
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169   junction.
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176 <211> LENGTH: 28
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178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Description of Artificial Sequence:
182   Forward/Reverse primer for PCR of measles HA gene
183   insert for HN-L junction.
185 <400> SEQUENCE: 11
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189 <210> SEQ ID NO: 12
190 <211> LENGTH: 25
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192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Description of Artificial Sequence: Reverse primer
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197   junctions.
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200 ccatcttccc gggtgactgt gcagc   25
203 <210> SEQ ID NO: 13
204 <211> LENGTH: 23

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206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Description of Artificial Sequence: Upstream HPIV2
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219 <213> ORGANISM: Artificial Sequence
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222 <223> OTHER INFORMATION: Description of Artificial Sequence: Downstream
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229 <210> SEQ ID NO: 15
230 <211> LENGTH: 31
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232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Description of Artificial Sequence: Upstream HPIV2
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247 <220> FEATURE:
248 <223> OTHER INFORMATION: Description of Artificial Sequence: Downstream
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256 <211> LENGTH: 26
257 <212> TYPE: DNA
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260 <220> FEATURE:
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270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence: HPIV1 HN
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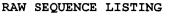
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282 <211> LENGTH: 15492
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Description of Artificial Sequence: Sequence of
288       pFLC.PIV32, 15492 bp in sense orientation.
290 <400> SEQUENCE: 19
291 accaaacaag agaagaaact tgtctgggaa tataaattta actttaaatt aacttaggat 60
292 taaagacatt gactagaagg tcaagaaaag ggaactctat aatttcaaaa atgttgagcc 120
293 tatttgatac atttaatgca cgtaggcaag aaaacataac aaaatcagcc ggtggagcta 180
294 tcattcctgg acagaaaaat actgtctcta tattcgccct tggaccgaca ataactgatg 240
295 ataatgagaa aatgacatta gctcttctat ttctatctca ttcactagat aatgagaaac 300
296 aacatgcaca aagggcaggg ttcttggtgt ctttattgtc aatggcttat gccaatccag 360
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302 tctcagggtt aagaaaaggc tttttcaccc gattggaagc tttcagacaa gatggaacag 720
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305 atgacctcac aaccatagaa aagaatatac aaattgttgg caactacata agagatgcag 900
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323 aaacgacaca atcaacacaa gaaccagca actcagtgcc accatctgtc aaccagaaat 1980
324 caaaccaaca gaaacaagtg agaaagatag tggatcaact gacaaaaata gacagtccgg 2040
325 gtcatcacac gaatgtacaa cagaagcaaa agatagaaat attgatcagg aaactgtaca 2100
326 gagaggacct gggagaagaa gcagctcaga tagtagagct gagactgtgg tctctggagg 2160
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328 caatgaaatt agaaagatgg ataaggactc tattgagggg aaaatgcgac aatctgcaaa 2280
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VERIFICATION SUMMARY
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DATE: 07/19/2001
TIME: 09:50:54

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STATISTICS SUMMARY
PATENT APPLICATION: **US/09/459,062**

DATE: 07/19/2001
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Input Set : **A:\17634341.app**
Output Set: **N:\CRF3\07192001\I459062.raw**

Application Serial Number: US/09/459,062
Alpha or Numeric: Numeric
Application Class: 424
Application File Date: 12-10-1999
Art Unit: 1648
Software Application: PatentIn
Total Number of Sequences: 57
Total Nucleotides: 48017
Total Amino Acids: 40
Number of Errors: 0
Number of Warnings: 0
Number of Corrections: 0

MESSAGE SUMMARY